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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/819,925      | 03/28/2001  | B. Mark Hirst        | 10004411-1          | 6060             |

7590 10/18/2002

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

TRAN, HOAN H

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2852     |              |

DATE MAILED: 10/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

DK

|                              |                 |              |
|------------------------------|-----------------|--------------|
| <b>Office Action Summary</b> | Application No. | Applicant(s) |
|                              | 09/819,925      | HIRST ET AL. |
|                              | Examiner        | Art Unit     |
|                              | Hoan H. Tran    | 2852         |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on \_\_\_\_.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1,3-13 and 16-19 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_ is/are allowed.

6) Claim(s) 1,3-13 and 16-19 is/are rejected.

7) Claim(s) \_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 28 March 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

|  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____.  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>8</u> . | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's amendment filed 07/12/2002 has been entered and carefully considered.
  - Claims 1, 9, 11-13 and 17-19 have been amended.
  - Claims 2, 24, 15 and 20 have been cancelled.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - Claim 8, line 1, "the internal heating element" is unclear; i.e., does it refer to the internal heating element of the fuser roller or the heating roller or both?

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

5. Claims 1, 6 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Cerrah.

[‘545]

Cerrah discloses an image forming apparatus comprising a means [15] for attracting toner to a surface of a recording medium [16]; a fusing system [Fig. 2] comprising a fuser roller [20] including a hollow tube, an outer surface [5] and an internal heating element [6]; a pressure roller [21] in contact with the fuser roller; and a heating roller [8] external to and in direct contact with the fuser roller [See Col. 4, line 38 to Col. 5, line 3]; wherein said heating roller comprises a hollow tube [Col. 5, lines 26-27] and an internal heating element [9].

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 3-5, 10, 11, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cerrah in view of Applicant's acknowledged prior art.

Cerrah, as discussed above, discloses the claimed invention except for the fuser roller's outer layer composed of an elastomeric material, and the pressure roller comprising a hollow tube, an internal heating element and an outer layer composed of an elastomeric material.

Applicant's acknowledged prior art discloses a fuser roller having an outer layer composed of an elastomeric material and a pressure roller comprising a hollow tube, an internal heating element and an outer layer composed of an elastomeric material. [See page 1, lines 15-18 of the specification]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the fuser roller disclosed by Cerrah with an outer layer composed of elastomeric material and the pressure roller also disclosed by Cerrah comprising a hollow tube, an internal heating element and an outer layer composed of an elastomeric material as taught by Applicant's acknowledged prior art for the purpose of having an improved fusing system capable of operating at a lower temperature yet capable of satisfactory fusing low and high density images.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cerrah in view of Isogai ['060].

Cerrah, as discussed above, discloses the claimed invention except for the internal heating element comprises tungsten filament halogen lamp.

Isogai, a previously cited prior art, discloses an image forming apparatus comprising a fixing device [24] having tungsten-halogen heating lamp [32] as a heating source [Col. 4, lines 26-27].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the internal heating element disclosed by Cerrah comprises tungsten-halogen heating lamp as taught by Isogai for the purpose of providing sufficient heat to the internal heating element during the fixing process.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cerrah in view of Ciaschi et al. ['740]

Cerrah, as discussed above, discloses the claimed invention except for a second heating roller external to and in contact with the pressure roller.

Ciaschi et al., a previously cited prior art, disclose a fixing device [Fig. 4] having a second heating roller [46] external to and in contact with the pressure roller [48].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fusing system disclosed by Cerrah including a second heating roller external to and in contact with the pressure roller as taught by Ciaschi et al. for the purpose of reducing the size of roller cores to reduce the overall space the apparatus needs.

11. Claims 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cerrah in view of Applicant's acknowledged prior art as applied to claims 1, 3-7, 10, 11, 16 and 17 above, and further in view of Isogai.

Cerrah in view of Applicant's acknowledged prior art, as discussed above, discloses the claimed invention except for the internal heating elements comprise tungsten filament halogen lamps.

Isogai, a previously cited prior art, discloses an image forming apparatus comprising a fixing device [24] having tungsten-halogen heating lamp [32] as a heating source [Col. 4, lines 26-27].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the internal heating elements disclosed by Cerrah as modified by Applicant's acknowledged prior art comprises tungsten-halogen heating lamp as taught by Isogai for the purpose of providing sufficient heat to the internal heating element during the fixing process.

12. Claims 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cerrah in view of Applicant's acknowledged prior arts as applied to claims 1, 3-7, 1, 111, 16 and 17 above, and further in view of Ciaschi et al.

Cerrah in view of Applicant's acknowledged prior art, as discussed above, discloses the claimed invention except for a second heating roller external to and in contact with the pressure roller.

Ciaschi et al., a previously cited prior art, disclose a fixing device [Fig. 4] having a second heating roller [46] external to and in contact with the pressure roller [48].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the fusing system disclosed by Cerrah as modified by Applicant's acknowledged prior art including a second heating roller external to and in contact with the pressure roller as taught by Ciaschi et al. for the purpose of reducing the size of roller cores to reduce the overall space the apparatus needs.

***Response to Arguments***

13. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

***Prior Art***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Moser ['735] discloses a fuser roller having an outer layer composed of an elastomeric material.
- Moser ['047] discloses an externally heated NFFR fuser.

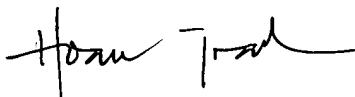
***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoan H. Tran whose telephone number is (703) 305-3523. The examiner can normally be reached from 8:30 AM - 5:00 PM Monday-Friday.

Art Unit: 2852

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Arthur Grimley can be reached at (703) 308-1373. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722/7724, or (703) 305-3431/3432 for regular and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



HHT

Oct. 16, 2002